



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/683,729	10/10/2003	Gerhard Mager	ZTP01P18005	1632
24131	7590	07/03/2006	EXAMINER	
LERNER GREENBERG STEMER LLP			MOON, SEOKYUN	
P O BOX 2480			ART UNIT	
HOLLYWOOD, FL 33022-2480			PAPER NUMBER	
			2629	

DATE MAILED: 07/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/683,729	<b>Applicant(s)</b> MAGER ET AL.	
	<b>Examiner</b> Seokyun Moon	<b>Art Unit</b> 2629	

**– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/10/03</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) filed on October 10, 2003 has been acknowledged and considered by the Examiner. An initial copy of Form PTO-1449 is included in this office action.

### ***Claim Objections***

3. **Claim 9** is objected to because of the following informalities: The term, "*the object*" disclosed in the claim is not mentioned in claim 1 on which claim 9 depends. Appropriate correction is required.

As best understood by Examiner, the claim limitation, "*the display structure according to claim 1*" disclosed in the claim will be interpreted as "*the display structure according to claim 8*" for further examination purpose since claim 8 is the only claim disclosing "*the object*" before claim 9.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1, 2, 4-7, 11-18, and 21-23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kupferer et al. (GB 2,022,872 A, herein after referred to as "Kupferer") in view of Jacobson et al. (US 6,445,489 B1, herein after referred to as "Jacobson").

As to **claim 1**, Kupferer [fig. 2] teaches a display structure ("*program selection apparatus*") included in a household appliance ("*electrical domestic apparatus*"), comprising a display device ("*display 3*"), with which information concerning the household appliance ("*progress*" and "*remaining time*") can be presented [abstract].

Kupferer does not expressly teach said display device being an electronic paper electrically influenced pixel-by-pixel.

However, Jacobson [fig. 1] teaches a display device included in a household appliance being an electronic paper [col. 11 lines 18-33] electrically influenced pixel-by-pixel [col. 8 lines 49-51].

It would have been obvious to one of ordinary skill in the art at the time of the invention to replace Kupferer's display with Jacobson's display device in order to provide a flexible display which allows the display device to be implemented on the

surfaces having various shapes, while reducing the cost to produce the display device [Jacobson: col. 1 lines 57-60 and col. 11 lines 13-17].

As to **claim 2**, Kupferer modified by Jacobson [fig. 2] teaches the display structure ("*program selection apparatus*") comprising at least one unit selected from the group consisting of an operating unit, a control unit ("*sensor areas 10 and 11*") of the household appliance, and an external unit, said at least one unit generating a display on said electronic paper [pg 2 lines 15-23, lines 57-61, and lines 64-69].

As to **claim 4**, Kupferer modified by Jacobson does not expressly teach the household appliance to have a curved surface and the electronic paper to be applied on said curved surface.

However, the modified Kupferer discloses the display device being flexible, electronic paper, and used on curved surface [Jacobson: col. 11 lines 13-34].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to specify the modified Kupferer's household appliance to have a curved surface since the modified Kupferer's display device is to be applied on a curved surface, in order to provide various designs for the appearance of the household appliance.

As to **claim 5**, Kupferer modified by Jacobson teaches the appliance having an operating element ("*slide 13*") and interrupting (display is controlled by "*slide 13*") said electronic paper.

As to **claim 6**, Kupferer teaches said operating element being one of the group consisting of a program selector ("*temperature adjustment*") switch and a button [pg 2 lines 15-23 and lines 64-70].

As to **claim 7**, Kupferer modified by Jacobson teaches said electronic paper to be adhesively attached as a film onto the surface [Jacobson: col. 11 lines 13-17].

Kupferer modified by Jacobson does not expressly disclose the appliance to have a surface of one of the group consisting of plastic, glass, wood, and metal.

However, Examiner takes official notice that it is well known to use plastic, glass, or metal for materials to manufacture household appliance's surface.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to specify the surface of Kupferer's household appliance to be made of one of plastic, glass, and metal.

As to **claim 11**, Kupferer modified by Jacobson teaches said display device being a membrane keyboard (inputting command) for operator input [pg 2 lines 44-52].

As to **claim 12**, Kupferer modified by Jacobson teaches said display device being a touch screen for operator input [pg 2 lines 44-52].

As to **claim 13**, all of the claim limitations have already been discussed with respect to the rejection of claim 1.

As to **claim 14**, all of the claim limitations have already been discussed with respect to the rejection of claim 2.

As to **claim 15**, all of the claim limitations have already been discussed with respect to the rejection of claim 4.

As to **claim 16**, all of the claim limitations have already been discussed with respect to the rejection of claim 5.

As to **claim 17**, all of the claim limitations have already been discussed with respect to the rejection of claim 6.

As to **claim 18**, all of the claim limitations have already been discussed with respect to the rejection of claim 7.

As to **claim 21**, all of the claim limitations have already been discussed with respect to the rejection of claim 11.

As to **claim 22**, all of the claim limitations have already been discussed with respect to the rejection of claim 12.

As to **claim 23**, all of the claim limitations have already been discussed with respect to the rejection of claims 1 and 4.

6. **Claims 3, 8, 9, 10, and 19-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kupferer and Jacobson as applied to claim 1-10 above, and further in view of Aisa (US 6,873,876 B1).

As to **claim 3**, Kupferer modified by Jacobson does not teach the display structure to comprise an external unit which is a computer.

However, Aisa [fig. 1] teaches a method of using computer to control household appliance [abstract].

It would have been obvious to one of ordinary skill in the art at the time of the invention to adopt Aisa's method of using computer to control household appliance in

the modified Kupferer in order to improve the control system of the appliances, thus to allow the control system to meet the users specific requirements [col. 3 lines 22-28].

As to **claim 8**, the modified Kupferer as discussed with respect to the rejection of claim 3 [Aisa: fig. 1] teaches the display structure, wherein:

an object ("*computer 10*") external to the appliance has an outer surface;

the object and the appliance have a connection ("*electrical network RE*") for transmitting data there-between [col. 7 lines 11-19].

The modified Kupferer as discussed with respect to the rejection of claim 3 does not teach said electronic paper being attached to said outer surface of said object.

However, Jacobson teaches the electronic paper being attached notebook computers.

It would have been obvious to one of ordinary skill in the art at the time of the invention to replace the display of Aisa's computer with Jacobson's display device in order to provide a flexible display which allows the display device to be implemented on the surfaces having various shapes, while reducing the cost to produce the display device [Jacobson: col. 1 lines 57-60 and col. 11 lines 13-17].

As to **claim 9**, Kupferer modified by Jacobson and Aisa [Aisa: fig. 1] teaches the object ("*computer 10*") to be an operating device.

As to **claim 10**, Kupferer modified by Jacobson and Aisa does not expressly teach the connection to be a wireless connection.

However, Examiner takes official notice that it is well known to transmit data between two electronic devices through wireless connection.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to replace Aisa's connection between the computer and the household appliance with a wireless connection in order to eliminate the need of wires for data transmission, and thus to allow a flexible range of placements of the computer and the household appliance.

As to **claim 19**, all of the claim limitations have already been discussed with respect to the rejection of claim 8 except for said electronic adhesively being attached as a film onto an outer surface of an external object.

The modified Kupferer teaches said electronic paper to be attached as a film on to an outer surface of an object on which the electronic paper is placed [Jacobson: col. 11 lines 13-17].

As to **claim 20**, all of the claim limitations have already been discussed with respect to the rejection of claim 10.

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seokyun Moon whose telephone number is (571) 272-5552. The examiner can normally be reached on Mon - Fri (8:30 a.m. - 5:00 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

June 22, 2006

S.M.

AMR A. AWAD  
PRIMARY EXAMINER  
*Amr A. Awad*